

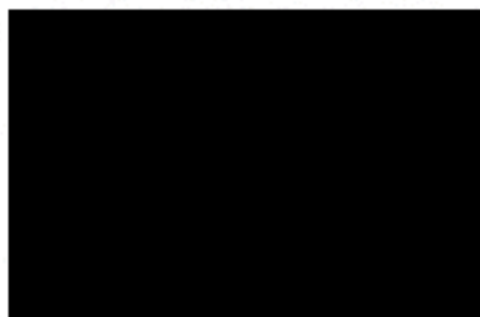


pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION
NORTHCENTRAL REGIONAL OFFICE

FILE


12/6/10



CERTIFIED MAIL NO. 7010 0290 0003 1042 7617

Re: Act 223, Section 208 Determination
Complaint No. 275992
Alba Boro, Bradford County

Dear Mr. 

The Department has investigated the possible degradation of your business's water supply well located on  Alba, PA, in response to a 10/18/2010 complaint that recent gas well drilling activities may have affected your water well. On 10/18/2010, the Department collected samples from your business's water supply. The samples were submitted to the Department's laboratory in Harrisburg for analysis. The analytical reports for the samples are included, as well as documents that will assist you with interpreting the sample results. The sample results showed methane is present at 9 mg/l in your water supplies. Methane gas was also detected in the headspace of your water well. The Department investigation indicates that gas well drilling has impacted your water supply.

Methane is the predominant component of natural gas. Drinking water standard limitations have not been established for methane gas and the Department is not aware of any associated health risks. The true level of concern begins above 28 mg/l methane, which is referred to as the saturation level. At this level, under normal atmospheric pressure, the water cannot hold additional methane in solution. The potential hazard occurs when the water is used for extended periods of time. This may allow the gas to come out of the water and concentrate in the air space of your home or building. There is a physical danger of fire or explosion due to the migration of natural gas into water wells or through soils into dwellings where it could be ignited by sources that are present in most homes/buildings. Natural gas can also cause a threat of asphyxiation, although this is extremely rare.

When the Department is made aware of methane levels greater than 3 mg/l, we notify the water supply owner of the hazards associated with methane in their water supply. Please be aware however, that the methane levels can fluctuate. This means that even with a relatively low level of methane, you should be vigilant of changes in your water that could indicate an increase in methane concentration.

Mr. [REDACTED]

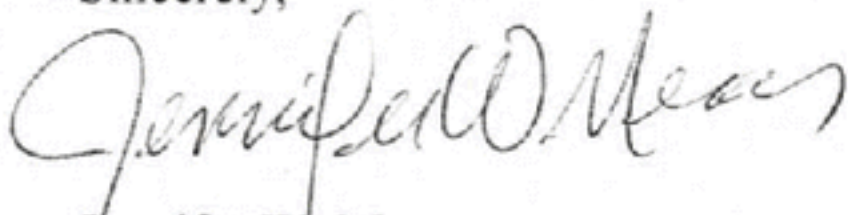
-2-

12/6/2010

It is the Department's recommendation that all water wells should be equipped with a working vent. This will help alleviate the possibility of concentrating these gases in areas where ignition would pose a threat to life or property. Please note that it is not possible to completely eliminate the hazards of having natural gas in your water supply by simply venting your well.

It is our understanding that Talisman is currently providing you with an alternate water supply. The Department is continuing to work with Talisman in order to permanently resolve this issue. Should you have any questions concerning this matter, please feel free to contact William J. Kosmer, P.G. at 570-974-2613.

Sincerely,



Jennifer W. Means
Environmental Program Manager
Oil and Gas Management

Enclosures:

Laboratory Analytical Results
"How to Interpret A Water Analysis Report"

cc:

Jennifer Means
John Ryder
Caleb Woolever
Talisman Energy
Complaint File




pennsylvania



DEPARTMENT OF ENVIRONMENTAL PROTECTION
NORTHCENTRAL REGIONAL OFFICE

2/4/2011



Re: Act 223, Section 208 Determination
Complaint No. 276655
Alba Boro, Bradford County

Dear Mr. and Mrs. 

The Department has investigated the possible degradation of your water supply well located at  Alba, PA in response to a 12/09/2010 complaint that recent gas well drilling activities may have affected your water well. On 12/10/2010, the Department collected samples from your home water supply. The samples were submitted to the Department's laboratory in Harrisburg for analysis. The analytical reports for the samples are included, as well as documents that will assist you with interpreting the sample results. The sample results showed methane is present at 18.4 mg/L in your water supply. The presence of dissolved methane in your water supply  appears to be related to background conditions. The Department's investigation does not indicate that gas well drilling has impacted your water supply.

Methane is the predominant component of natural gas. Drinking water standard limitations have not been established for methane gas and the Department is not aware of any associated health risks. The true level of concern begins above 28 mg/l methane, which is referred to as the saturation level. At this level, under normal atmospheric pressure, the water cannot hold additional methane in solution. The potential hazard occurs when the water is used for extended periods of time. This may allow the gas to come out of the water and concentrate in the air space of your home or building. There is a physical danger of fire or explosion due to the migration of natural gas into water wells or through soils into dwellings where it could be ignited by sources that are present in most homes/buildings. Natural gas can also cause a threat of asphyxiation, although this is extremely rare.

When the Department is made aware of methane levels greater than 3 mg/l, we notify the water supply owner of the hazards associated with methane in their water supply. Please be aware however, that the methane levels can fluctuate. This means that even with a relatively low level of methane, you should be vigilant of changes in your water that could indicate an increase in methane concentration.

It is the Department's recommendation that all water wells should be equipped with a working vent. This will help alleviate the possibility of concentrating these gases in areas where ignition would pose a threat to life or property. Please note that it is not possible to completely eliminate the hazards of having natural gas in your water supply by simply venting your well.

2/4/2011

Should you have any questions concerning this matter, please feel free to contact William J. Kosmer, P.G. at 570-974-2613.

Sincerely,



William J. Kosmer, P.G.
Licensed Professional Geologist
Oil and Gas Management

Enclosures:
Laboratory Analytical Results
"How to Interpret A Water Analysis Report"

cc:
Jennifer Means
John Ryder
Caleb Woolever
Talisman Energy
Complaint File
Alba Gas Migration File



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION
NORTHCENTRAL REGIONAL OFFICE

FILE

12/6/10

[REDACTED]
Alba, PA 16910

CERTIFIED MAIL NO. 7010 0290 0003 1042 7594

Re: Act 223, Section 208 Determination
Complaint No. 274977
Alba Boro, Bradford County

Dear Ms. [REDACTED]

The Department has investigated the possible degradation of your water supply well located at [REDACTED] Alba, PA, in response to a 10/15/2010 complaint that recent gas well drilling activities may have affected your water well. On 10/15/2010, the Department collected samples from your home water supply. The samples were submitted to the Department's laboratory in Harrisburg for analysis. The analytical reports for the samples are included, as well as documents that will assist you with interpreting the sample results. The sample results showed methane is present at 9 mg/l in your water supplies. Methane gas was also detected in the headspace of your water wells. The Department investigation indicates that gas well drilling impacted your water supply.

Methane is the predominant component of natural gas. Drinking water standard limitations have not been established for methane gas and the Department is not aware of any associated health risks. The true level of concern begins above 28 mg/l methane, which is referred to as the saturation level. At this level, under normal atmospheric pressure, the water cannot hold additional methane in solution. The potential hazard occurs when the water is used for extended periods of time. This may allow the gas to come out of the water and concentrate in the air space of your home or building. There is a physical danger of fire or explosion due to the migration of natural gas into water wells or through soils into dwellings where it could be ignited by sources that are present in most homes/buildings. Natural gas can also cause a threat of asphyxiation, although this is extremely rare.

When the Department is made aware of methane levels greater than 3 mg/l, we notify the water supply owner of the hazards associated with methane in their water supply. Please be aware however, that the methane levels can fluctuate. This means that even with a relatively low level of methane, you should be vigilant of changes in your water that could indicate an increase in methane concentration.

It is the Department's recommendation that all water wells should be equipped with a working vent. This will help alleviate the possibility of concentrating these gases in areas where ignition

Ms. [REDACTED]

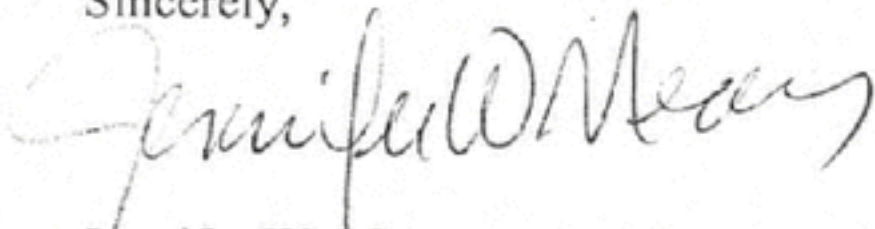
-2-

12/6/2010

would pose a threat to life or property. Please note that it is not possible to completely eliminate the hazards of having natural gas in your water supply by simply venting your well.

It is our understanding that Talisman is currently providing you with an alternate water supply. The Department is continuing to work with Talisman in order to permanently resolve this issue. Should you have any questions concerning this matter, please feel free to contact William J. Kosmer, P.G. at 570-974-2613.

Sincerely,



Jennifer W. Means
Environmental Program Manager
Oil and Gas Management

Enclosures:

Laboratory Analytical Results

"How to Interpret A Water Analysis Report"

cc:

Jennifer Means
John Ryder
Caleb Woolever
Talisman Energy
Complaint File



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION
NORTHCENTRAL REGIONAL OFFICE


1/3/2011



CERTIFIED MAIL NO. 7009 3410 0000 3617 7732

Re: Act 223, Section 208 Determination
Complaint No. 27275203
Alba Boro., Bradford County

Dear Ms. 

The Department has investigated the possible degradation of your water supplies in response to a 10/25/2010 complaint that recent gas well drilling activities may have affected your water wells. On 10/25/2010, the Department collected samples from your home water supply and the water supply for your rental property. The samples were submitted to the Department's laboratory in Harrisburg for analysis. The analytical reports for the samples are included, as well as documents that will assist you with interpreting the sample results. The sample results showed methane is present at 26.0 mg/l and 11.6 mg/l in your water supplies. Methane gas was also detected in the headspace of your water wells. The Department investigation indicates that gas well drilling has impacted your water supplies. 

Methane is the predominant component of natural gas. Drinking water standard limitations have not been established for methane gas and the Department is not aware of any associated health risks. The true level of concern begins above 28 mg/l methane, which is referred to as the saturation level. At this level, under normal atmospheric pressure, the water cannot hold additional methane in solution. The potential hazard occurs when the water is used for extended periods of time. This may allow the gas to come out of the water and concentrate in the air space of your home or building. There is a physical danger of fire or explosion due to the migration of natural gas into water wells or through soils into dwellings where it could be ignited by sources that are present in most homes/buildings. Natural gas can also cause a threat of asphyxiation, although this is extremely rare.

When the Department is made aware of methane levels greater than 7 mg/l, we notify the water supply owner of the hazards associated with methane in their water supply. Please be aware however, that the methane levels can fluctuate. This means that even with a relatively low level of methane, you should be vigilant of changes in your water that could indicate an increase in methane concentration.

It is the Department's recommendation that all water wells should be equipped with a working vent. This will help alleviate the possibility of concentrating these gases in areas where ignition

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Ms. [REDACTED]

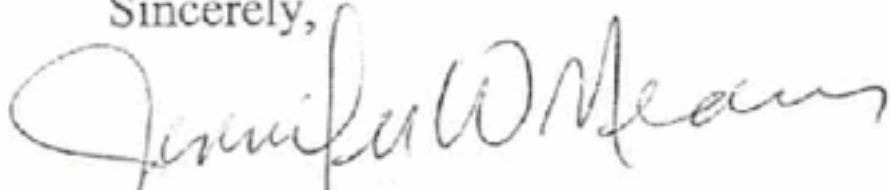
-2-

1/3/2011

would pose a threat to life or property. Please note that it is not possible to completely eliminate the hazards of having natural gas in your water supply by simply venting your well.

The Department is continuing to work with Talisman in order to permanently resolve this issue. Should you have any questions concerning this matter, please feel free to contact William J. Kosmer, P.G. at 570-974-2613.

Sincerely,



Jennifer W. Means
Environmental Program Manager
Oil and Gas Management

Enclosures:

Laboratory Analytical Results
"How to Interpret A Water Analysis Report"

cc:

Jennifer Means
John Ryder
Caleb Woolever
Talisman Energy
Complaint File
Kosmer



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION
NORTHCENTRAL REGIONAL OFFICE

12/23/2010

Re: Act 223, Section 208 Determination
Complaint No. 276316
Alba Boro, Bradford County

Dear Mr. [REDACTED]

The Department has investigated the possible degradation of your water supply well located at [REDACTED] Alba, PA response to a 10/20/2010 complaint that recent gas well drilling activities may have affected your water well. On 10/20/2010, the Department collected samples from your home water supply. The samples were submitted to the Department's laboratory in Harrisburg for analysis. The analytical reports for the samples are included, as well as documents that will assist you with interpreting the sample results. The sample results showed methane is present at 35.9 mg/L in your water supply. The presence of dissolved methane in your [REDACTED] water supply appears to be related to background conditions. The Department investigation does not indicate that gas well drilling has impacted your water supply.


Methane is the predominant component of natural gas. Drinking water standard limitations have not been established for methane gas and the Department is not aware of any associated health risks. The true level of concern begins above 28 mg/l methane, which is referred to as the saturation level. At this level, under normal atmospheric pressure, the water cannot hold additional methane in solution. The potential hazard occurs when the water is used for extended periods of time. This may allow the gas to come out of the water and concentrate in the air space of your home or building. There is a physical danger of fire or explosion due to the migration of natural gas into water wells or through soils into dwellings where it could be ignited by sources that are present in most homes/buildings. Natural gas can also cause a threat of asphyxiation, although this is extremely rare.

When the Department is made aware of methane levels greater than 3 mg/l, we notify the water supply owner of the hazards associated with methane in their water supply. Please be aware however, that the methane levels can fluctuate. This means that even with a relatively low level of methane, you should be vigilant of changes in your water that could indicate an increase in methane concentration.

It is the Department's recommendation that all water wells should be equipped with a working vent. This will help alleviate the possibility of concentrating these gases in areas where ignition would pose a threat to life or property. Please note that it is not possible to completely eliminate the hazards of having natural gas in your water supply by simply venting your well.

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Mr. [REDACTED]

-2-

12/23/2010

Should you have any questions concerning this matter, please feel free to contact William J. Kosmer, P.G. at 570-974-2613.

Sincerely,



William J. Kosmer, P.G.
Licensed Professional Geologist
Oil and Gas Management

Enclosures:
Laboratory Analytical Results
"How to Interpret A Water Analysis Report"

cc:
Jennifer Means
John Ryder
Caleb Woolever
Talisman Energy
Complaint File

Date of Issue: 12/22/2010 10:12:13
1 of 3
DEP Bureau Of Laboratories - Harrisburg
P.O. Box 1467
2575 Interstate Drive
Harrisburg, PA 17105-1467

PAGE

Contact Phone Number: (717) 346-7200

Analytical Report FOR
Oil And Gas Mgmt

Sample ID: 0900 005

Status: Completed

Name of Sample Collector: William J Kosmer
Date Sample was Collected: 10/20/2010 02:45:00 PM

County: NOT INDICATED
Municipality: NOT INDICATED

State:

Sample Medium :
Sample Medium Type:

Location: NOT INDICATED
Reason: Complaint

Laboratory Sample ID: O2010008998
Completed

Suite: METH

Legal Seal: I006035 Intact: YES
Legal Seal: I006037 Intact: YES

| Test Codes/CAS# - Description | | Reported Results | Date And Time Analyzed |
|-------------------------------|-----------------------|------------------|---------------------------|
| Analyst | Test Method | | |
| 74828 | Methane | 35900 UG/L | 10/22/2010 |
| 12:00 AM | DACLEMENS BOL BOL6019 | | |
| 74851 | Ethene | 19.8 UG/L (U) | 10/22/2010 |
| 12:00 AM | DACLEMENS BOL BOL6019 | | |
| 74840 | Ethane | 17.6 UG/L | 10/22/2010 |
| 12:00 AM | DACLEMENS BOL BOL6019 | | |
| 74986 | Propane | 19.8 UG/L (U) | 10/22/2010 |
| 12:00 AM | DACLEMENS BOL BOL6019 | | |

Analytical Report FOR
Oil And Gas Mgmt

Sample ID: 0900 005

Status: Completed

The results of the analyses provided in this laboratory report relate only to the sample(s) identified in the report. Unless otherwise noted, the results presented on this laboratory report meet all the requirements of The NELAC Institute (TNI). Sample was in acceptable condition when received by the Laboratory. Any exceptions are noted in the report. Tests noted with "****" are not included in our NJ NELAP Annual Certified Parameter List.

Taru Upadhyay, Technical Director, Bureau of Laboratories

TALISMAN
E N E R G Y

TALISMAN ENERGY USA INC.
317 Daniel Zanker Drive
Horseshoe, New York 11815
Tel: (607) 562-4000
Fax: (607) 562-4001

Dear Landowner,

On behalf of Talisman Energy USA Inc. (TEUSA), Moody and Associates, Inc. conducted water sampling activities at the water source(s) within the subject property. The analytical testing of those samples was performed by an independent state-certified water testing laboratory and the results have been provided to the Pennsylvania Department of Environmental Protection (PADEP), Bureau of Oil and Gas Management. The enclosed report is being provided to you to summarize the water quality results.

We thank you for the opportunity to provide you with these results. If you should have any questions about this report, or our operations, please call our Good Neighbor Hotline (866-566-4747). Talisman also maintains a 24-hour emergency response phone number (800-530-5392); however, you are urged to first dial 911 in the event of an emergency.

Sincerely,

TALISMAN ENERGY USA INC.



Moody
and Associates, Inc.
www.moody-t.com

January 11, 2011

Dale Saunders
81 Sister Street
Canton, PA 17724

RE: Notification of Water Well Sampling Results

Dear Mr. Saunders:

Moody and Associates, Inc. ("Moody") has collected several samples of your water supply well ("W1") on behalf of Talisman Energy USA, Inc.

The sampling events reported in this letter occurred on November 8, 2010, November 15, 2010, November 22, 2010, December 2, 2010, and December 7, 2010. The samples were collected from your kitchen sink prior to the water passing through your Pur water filter. It is the understanding of Moody that your well water is otherwise untreated prior to end use.

The water quality results of the samples collected during these events are provided in the laboratory analytical reports attached to this letter. Chemical analyses for W1 were conducted by TestAmerica, Inc. of Nashville, Tennessee. TestAmerica, Inc. is certified by the Pennsylvania Department of Environmental Protection ("PADEP") to perform such analyses.

The analytical results for W1 indicate the following:

- November 8, 2010 – elevated turbidity at 4.4 Nephelometric Turbidity Units (NTU) and the presence of methane at 8.7 mg/L.
- November 15, 2010 – elevated turbidity at 2.8 NTU and the presence of methane at 10.4 mg/L.
- December 2, 2010 – elevated turbidity at 1.6 NTU and the presence of methane at 3.71 mg/L.
- December 7, 2010 – elevated turbidity at 1.2 NTU and the presence of methane at 2.72 mg/L.

The other chemical analytes sampled in W1 were within the standard values established by the PADEP and the United States Environmental Protection Agency ("EPA") for public water

MEADVILLE, PA 11548 Carson Road, Meadville, PA 16335 • Phone: 814.724.4970 • FAX: 814.724.4973 • 800.893.5040
HOUSTON, PA 15901 Johnson Road, Building 2, Suite 101 • Houston, PA 15342 • Phone: 724.746.5200 • FAX: 724.746.5603 • 866.336.0000
SAVIE, PA P.O. Box 309 • Sayre, PA 16840-0309 • Phone: 607.565.2126 • FAX: 607.565.2054 • 877.602.3120
FAIRPORT, NY 342 Frontal Road, Fairport, NY 14450 • Phone: 315.986.4365 • FAX: 315.986.4352 • 800.954.4310

supply sources. Please note that not all analytes sampled have a respective standard value established by the PADEP or EPA.

Though these sampling events were not performed to determine the potability of your water and the PADEP does not regulate residential water sources, the maximum contaminant level for turbidity is 1 NTU for public water supplies. Turbidity is considered a primary contaminant by the PADEP. Turbidity is a measure of cloudiness of water and is used as an indicator of potentially disease causing organisms in the water. It is caused by suspended matter or impurities that interfere with the clarity of the water. These impurities may include clay, silt, finely divided matter, and microscopic organisms.

The presence of methane in groundwater can present a safety risk due to the potential explosion hazard. The PADEP recommends that methane concentrations that are above 7 mg/L in groundwater be regularly monitored to confirm that concentrations are not increasing. The PADEP also recommends that methane concentrations that exceed 28 mg/L in groundwater be actively remediated.

The presence of methane, and groundwater quality in general (for example the level of turbidity, nitrate, sulfate, metals, microscopic organisms, etc.) may vary from year to year or season to season due to many factors such as rainfall, snow melt, temperature changes, barometric pressure, etc. Your water well may not always contain methane or the concentrations of methane may differ from our findings at different parts of the year. Methane occurs naturally in many groundwater wells in Tioga and Bradford Counties. A fact sheet from the PADEP regarding methane gas and your water well is included with this letter.

The Penn State Cooperative Extension website located at <http://extension.psu.edu/water> can provide further information and interpretation on the analytical data attached.

To date, Moody has installed a vented well cap on your well and provided three (3) methane detectors for your installation in your home. The methane detectors provided include: one (1) HIC-842-RS/A methane only detector and two (2) Safe-T-Alert methane only detectors. Moody will continue to notify you of results of samples collected from your well as they become available. If you have any questions with regard to the results presented herein, please contact this office.

Respectfully Submitted,

Moody & Associates, Inc.



Timothy M. Eriksen, P.G.
Project Geologist

attachments

cc: Kyle Hegel – Talisman Energy USA, Inc.
file

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRocha Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-62993-1
Client Project/Site: Sanders WI - 11/8/10

For:
Moody & Associates, Inc.
703 South Elmer Avenue
Suite 111
Sayre, Pennsylvania 18840

Attn: Timothy M Eriksen

Lidya Gulizia

Authorized for release by:
1/6/2011 5:10 PM

Lidya Gulizia
Project Manager I
lidya.gulizia@testamericainc.com

Results relate only to the items tested and the sample(s) as received by the laboratory. The laboratory is not responsible for the accuracy of the results if the sample is not representative of the material tested. Pursuant to NELAP, this report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is mandatory to be in compliance with the requirements of a traditionally handwritten signature.



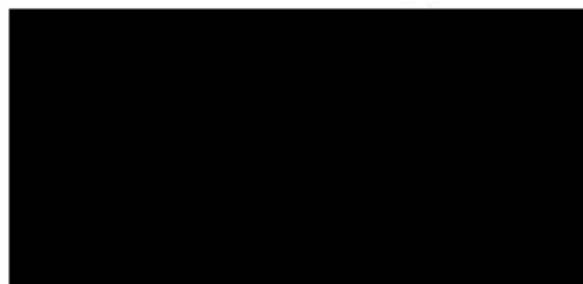
pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION
NORTHCENTRAL REGIONAL OFFICE

Alba Stray Gas
Migration File

IC Alba Church



1/31/2011



CERTIFIED MAIL NO. 7009 3410 0000 3618 6949

Re: Act 223, Section 208 Determination
Complaint No. 276819
Alba Boro, Bradford County

Dear Mr. 

The Department has investigated the possible degradation of your water supply well located at the First Christian Church  Alba, PA, in response to a 10/26/2010 complaint that recent gas well drilling activities may have affected your water well. On 11/23/2010, the Department collected samples from your water supply. The samples were submitted to the Department's laboratory in Harrisburg for analysis. The analytical reports for the samples are included, as well as documents that will assist you with interpreting the sample results. The sample results showed methane is present at 22.4 mg/l in your water supply. Methane gas was also detected in the headspace of your water well. The Department investigation indicates that gas well drilling  impacted your water supply.

Methane is the predominant component of natural gas. Drinking water standard limitations have not been established for methane gas and the Department is not aware of any associated health risks. The true level of concern begins above 28 mg/l methane, which is referred to as the saturation level. At this level, under normal atmospheric pressure, the water cannot hold additional methane in solution. The potential hazard occurs when the water is used for extended periods of time. This may allow the gas to come out of the water and concentrate in the air space of your home or building. There is a physical danger of fire or explosion due to the migration of natural gas into water wells or through soils into dwellings where it could be ignited by sources that are present in most homes/buildings. Natural gas can also cause a threat of asphyxiation, although this is extremely rare.

When the Department is made aware of methane levels greater than 3 mg/l, we notify the water supply owner of the hazards associated with methane in their water supply. Please be aware however, that the methane levels can fluctuate. This means that even with a relatively low level of methane, you should be vigilant of changes in your water that could indicate an increase in methane concentration.

Mr. [REDACTED]

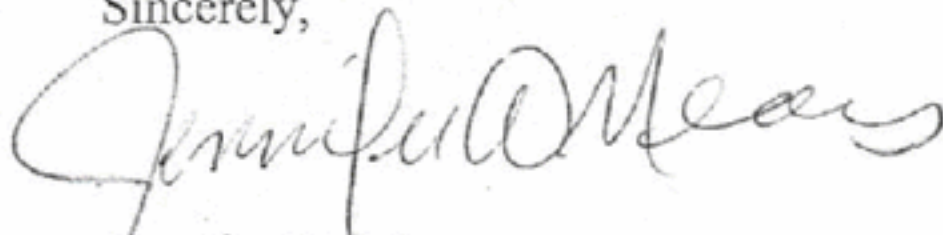
-2-

2/1/2011

It is the Department's recommendation that all water wells should be equipped with a working vent. This will help alleviate the possibility of concentrating these gases in areas where ignition would pose a threat to life or property. Please note that it is not possible to completely eliminate the hazards of having natural gas in your water supply by simply venting your well.

The Department is continuing to work to permanently resolve this issue. Should you have any questions concerning this matter, please feel free to contact William J. Kosmer, P.G. at 570-974-2613.

Sincerely,



Jennifer W. Means
Environmental Program Manager
Oil and Gas Management

Enclosures:

Laboratory Analytical Results

"How to Interpret A Water Analysis Report"

cc:

Jennifer Means

John Ryder

William J. Kosmer, P.G.

Caleb Woolever

Complaint File

Alba Stray Gas Migration File

Date of Issue: 01/31/2011 12:01:51

PAGE 1 of

2
DEP Bureau Of Laboratories - Harrisburg
P.O. Box 1467
2575 Interstate Drive
Harrisburg, PA 17105-1467

Contact Phone Number: (717) 346-7200

Analytical Report FOR
Oil And Gas Mgmt

Sample ID: 0900 019

Status: Completed

Name of Sample Collector: William J Kosmer
Date Sample was Collected: 12/10/2010 12:30:00 PM

County: Bradford
Municipality: Alba Boro

State: PA

[REDACTED]
ALBA, PA. 16910

Sample Medium : Ground water
Sample Medium Type: Water

Location: NOT INDICATED
Reason: Complaint

Laboratory Sample ID: I2010038017
Completed
Standard Analysis: 942

Legal Seal: H003903 Intact: YES
Legal Seal: H003904 Intact: YES

| Test Codes/CAS# - Description Analyst Test Method | Reported Results | Date And Time Analyzed |
|--|------------------|---------------------------|
| 00927A MAGNESIUM T | 0.962 MG/L | 12/15/2010 09:29 |
| AM MOBERCASH EPA 200.7 | | |
| 01055A MANGANESE T | 11.000 UG/L | 12/15/2010 09:29 |
| AM MOBERCASH EPA 200.7 | | |
| 01007A BARIUM T | 120.000 UG/L | 12/15/2010 09:29 |
| AM MOBERCASH EPA 200.7 | | |
| 00916A CALCIUM T | 6.285 MG/L | 12/15/2010 09:29 |
| AM MOBERCASH EPA 200.7 | | |
| 01045A IRON T | 310.000 UG/L | 12/15/2010 09:29 |
| AM MOBERCASH EPA 200.7 | | |
| 00937A POTASSIUM T | 1.757 MG/L | 12/15/2010 09:29 |
| AM MOBERCASH EPA 200.7 | | |
| 00929A SODIUM T | 167.000 MG/L | 12/15/2010 09:29 |
| AM MOBERCASH EPA 200.7 | | |
| 00940A CHLORIDE | 56.6 MG/L | 12/24/2010 08:00 |
| AM CRADEK SM 4500-CL | | |
| 00900 Hardness T | 20 MG/L | 12/15/2010 09:29 |

Analytical Report FOR
Oil And Gas Mgmt

Sample ID: 0900 019

Status: Completed

| Test Codes/CAS# - Description Analyst Test Method | Reported Results | Date And Time Analyzed |
|--|------------------|---------------------------|
| 00403 pH PM GDELONG SM 4500H-B ** Comment ** Time Limit For Test Exceeded | 8.5 pH units | 12/14/2010 02:25 |
| 00095 SPC @ 25.0 C PM GDELONG SM 2510B | 757.00 umhos/cm | 12/16/2010 02:21 |
| 38260 MBAS PM FVODOPIVECSM 5540 C ** Comment ** Time Limit For Test Exceeded | <0.20 MG/L | 12/13/2010 02:00 |

The % Recovery of both the Quality Control Standard and the Matrix Spike were both below the minimum acceptable limits.

| | | |
|---|--------------|------------------|
| 00410 ALKALINITY PM GDELONG SM 2320B | 298.8 MG/L | 12/14/2010 02:25 |
| 01082A STRONTIUM T AM MOBERCASH EPA 200.7 | 364.000 UG/L | 12/15/2010 09:29 |
| 82079 TURBIDITY PM TVOROBECHEPA 180.1 | 2.49 NTU | 12/14/2010 03:03 |
| 70300U TDS180 -USGS AM LWILKINSONUSGS I-1750 | 456 MG/L | 12/13/2010 12:00 |

The results of the analyses provided in this laboratory report relate only to the sample(s) identified in the report. Unless otherwise noted, the results presented on this laboratory report meet all the requirements of The NELAC Institute (TNI). Sample was in acceptable condition when received by the Laboratory. Any exceptions are noted in the report. Tests noted with "****" are not included in our NJ NELAP Annual Certified Parameter List.

Taru Upadhyay, Technical Director, Bureau of Laboratories

Date of Issue: 01/31/2011 12:01:04

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DEP Bureau Of Laboratories - Harrisburg
P.O. Box 1467
2575 Interstate Drive
Harrisburg, PA 17105-1467

Contact Phone Number: (717) 346-7200

Analytical Report FOR
Oil And Gas Mgmt

Sample ID: 0900 020

Status:

Name of Sample Collector: William J Kosmer

Date Sample was Collected: 12/10/2010

County: NOT INDICATED

State: PA

Municipality: NOT INDICATED

ALBA, PA.

Sample Medium :
Sample Medium Type:

Location: NOT INDICATED
Reason: Complaint

Laboratory Sample ID: 02010010743
Suite: METH

Legal Seal: H003905 Intact: YES
Legal Seal: H003906 Intact: YES

| Test Codes/CAS# - Description | Reported Results | Date And Time Analyzed |
|-------------------------------|------------------|------------------------|
| Analyst Test Method | | |
| 74828 Methane | 18400 UG/L (Q) | 12/14/2010 12:00 |
| AM DACLEMENS BOL BOL6019 | | |
| 74851 Ethene | 7.90 UG/L (U) | 12/14/2010 12:00 |
| AM DACLEMENS BOL BOL6019 | | |
| 74840 Ethane | 7.90 UG/L (U) | 12/14/2010 12:00 |
| AM DACLEMENS BOL BOL6019 | | |
| 74986 Propane | 19.8 UG/L (U) | 12/14/2010 12:00 |
| AM DACLEMENS BOL BOL6019 | | |

12_10_2010_Meth.txt

Sample ID: 0900 020

Status:

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Taru Upadhyay, Technical Director, Bureau of Laboratories

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Analytical Report FOR
Oil And Gas Mgmt

Sample ID: 0900 020

Status:

ORGANICS LABORATORY QUALIFIERS

U - Indicates analysis was performed for the compound but it was not detected.
The sample quantitation limit is reported.